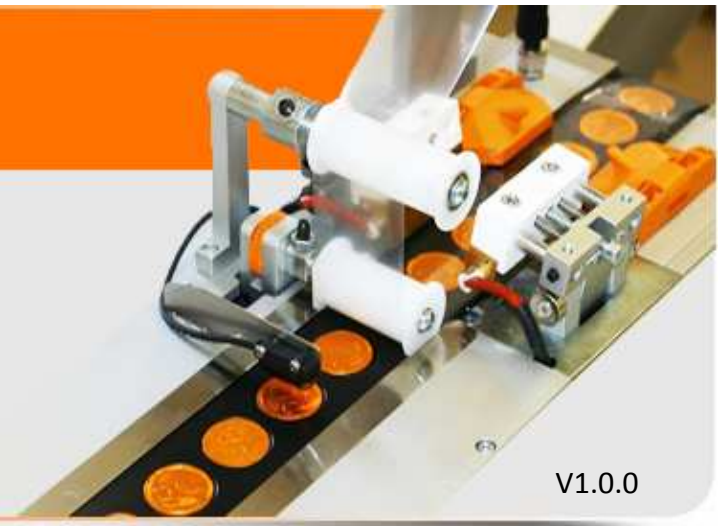
Firmware

UPGRADE



V1.0.0

AMTEC.PRO
Automating Your Production
Obrtniška 29, SI-1420 Trbovlje
T: +386 3 564 94 94
F: +386 3 564 94 95
www.amtecpro.si

PREFACE

These are manuals showing how to upgrade taping module with new firmware.

CONTACT INFORMATION

Machine was designed and produced in AMTEC.PRO d.o.o. For any additional information contact directly to the manufacturer:

AMTEC.PRO
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Obrtniška 29, SI-1420 Trbovlje
T: +386 3 564 94 94
F: +386 3 564 94 95
www.amtecpro.si

GENERAL PRECAUTIONS

Only qualified personal with the proper technical training with this equipment and awareness of the possible hazard can perform upgrade on the equipment.

Before proceeding with work or upgrade read this manual very carefully.

User manual provides guidelines and education for of users how to upgrade the machine. It contains important information to avoid potential hazards to the operator and equipment.

Attention	**Electrical Hazard**	**Temperature Hazard**	**Mechanical Hazard**

Warning signs have been placed on the machine to bring the attention of the operators and technicians to the potential hazard. It's recommended not to remove safety parts on the machine.

SAFETY PRECAUTIONS

Warning: This manual contains important safety and operating information. Please read and follow the instructions in this manual. Failure to do so could result in personal injury or damage to your device.

Warning: Please turn machine off and disconnect power cord before removing any panel.

Warning: Heaters can be hot several minutes after switch off. Before any maintenance, turn machine off, disconnect the power cords and compressed air supply. Please allow heater to cool.

Warning: Be aware of the hazard to pinch fingers to the sprocket wheel while moving. Cover the sprocket wheel after installing new tape.

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1 BASICS

Upgrade of machine firmware is done when we'd like to increase machine functionality or to remove software bugs from old versions of firmware.

Connection to machine can be made only with drivers installed on computer. Drivers can be installed to PC running Windows XP SP3, Windows Vista SP1 or Windows 7 operating systems. Both 32-bit and 64-bit versions are supported.

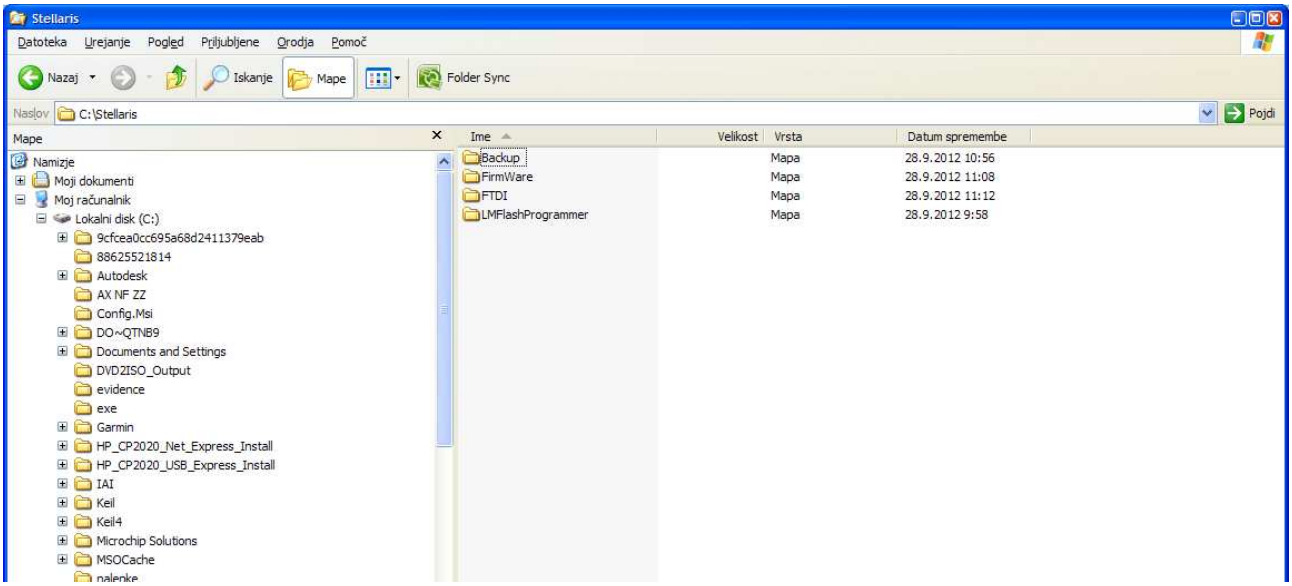
Upgrading of software is done with "LM Flash Programmer" utility. Install this utility to computer after installing driver.

Copy "Stellaris" folder to C disk before performing an upgrade.

2 INSTALLING SOFTWARE

2.1 UNPACKING SOFTWARE

Unpack "Stellaris.zip" to folder C drive. Folder "c:\Stellaris" will be created with the following content:



Be careful not to create "C:\Stellaris\Stellaris " or to extract the content directly to C drive.

2.2 INSTALLING DRIVERS

Before starting an upgrade of machine firmware drivers must be installed to computer. First copy "Stellaris" folder to C disk.

Connect machine to PC with USB cable. If necessary lose screws on machines front panel to connect it with USB cable.

Windows will start searching drivers for the machine. In some cases the windows will find drivers by them self. If not the drivers must be installed manually.

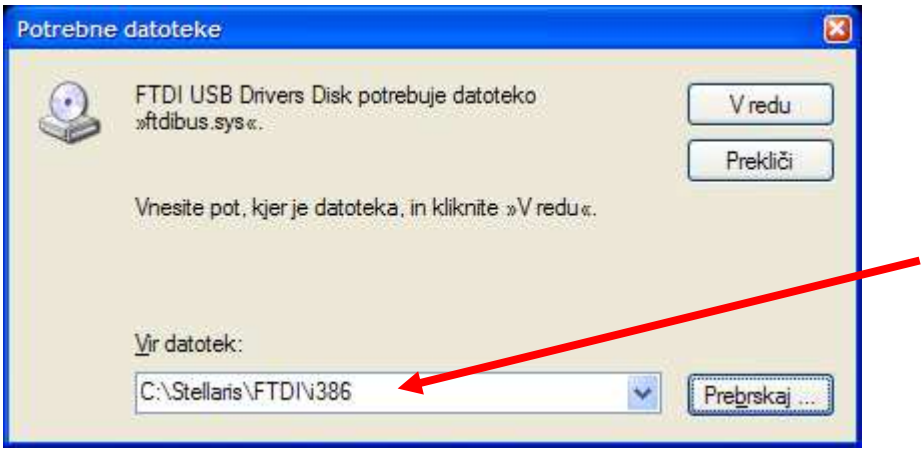
2.2.1 MANUAL DRIVER INSTALLATION WINDOWS XP

If Windows doesn't find drivers the following steps must be done:

1. Windows will ask for location of some files. Click OK button.

Vstavite disketo
Prosimo, vstavite CD z oznako »FTDI USB Drivers Disk« v CD-ROM pogon (F:) in kliknite »V redu«.
»V redu« lahko kliknete tudi, če želite kopirati datoteke z nekega drugega mesta, npr. z diskete ali iz omrežnega strežnika.
V redu
Prekliči

2. In new windows select source as "c:\Stellaris\FTDI\i386" and click OK button

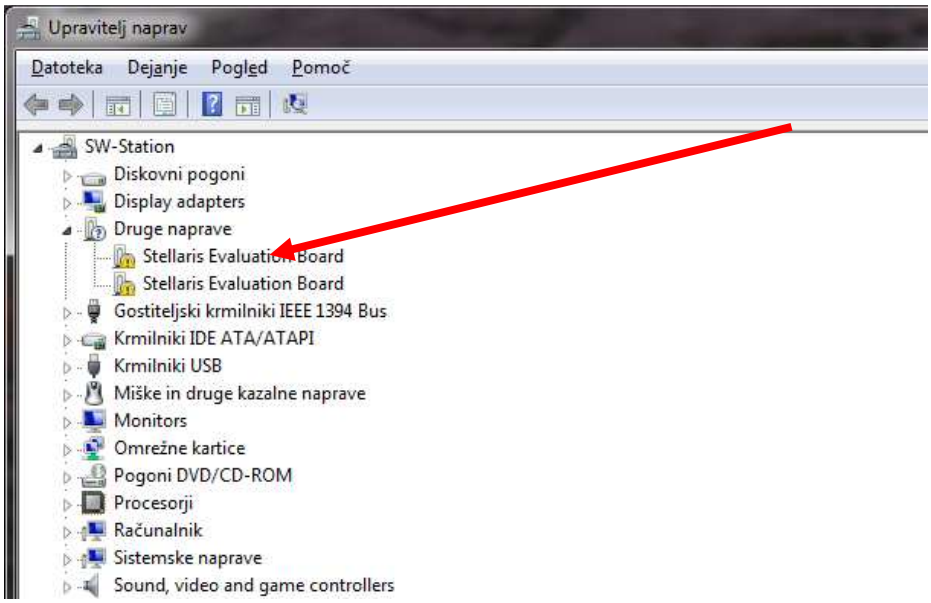


Repeat step 1 and 2 until all devices are installed.

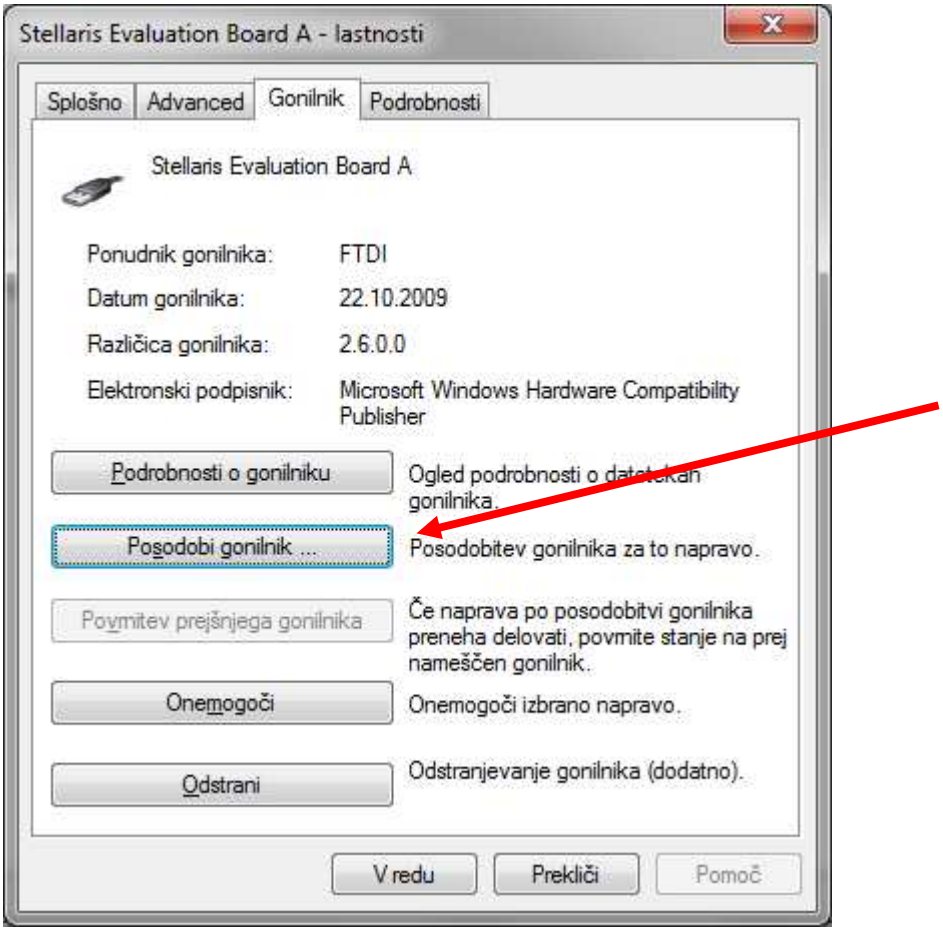
2.2.2 MANUAL DRIVER INSTALLATION WINDOWS 7

If Windows doesn't find drivers the following steps must be done.

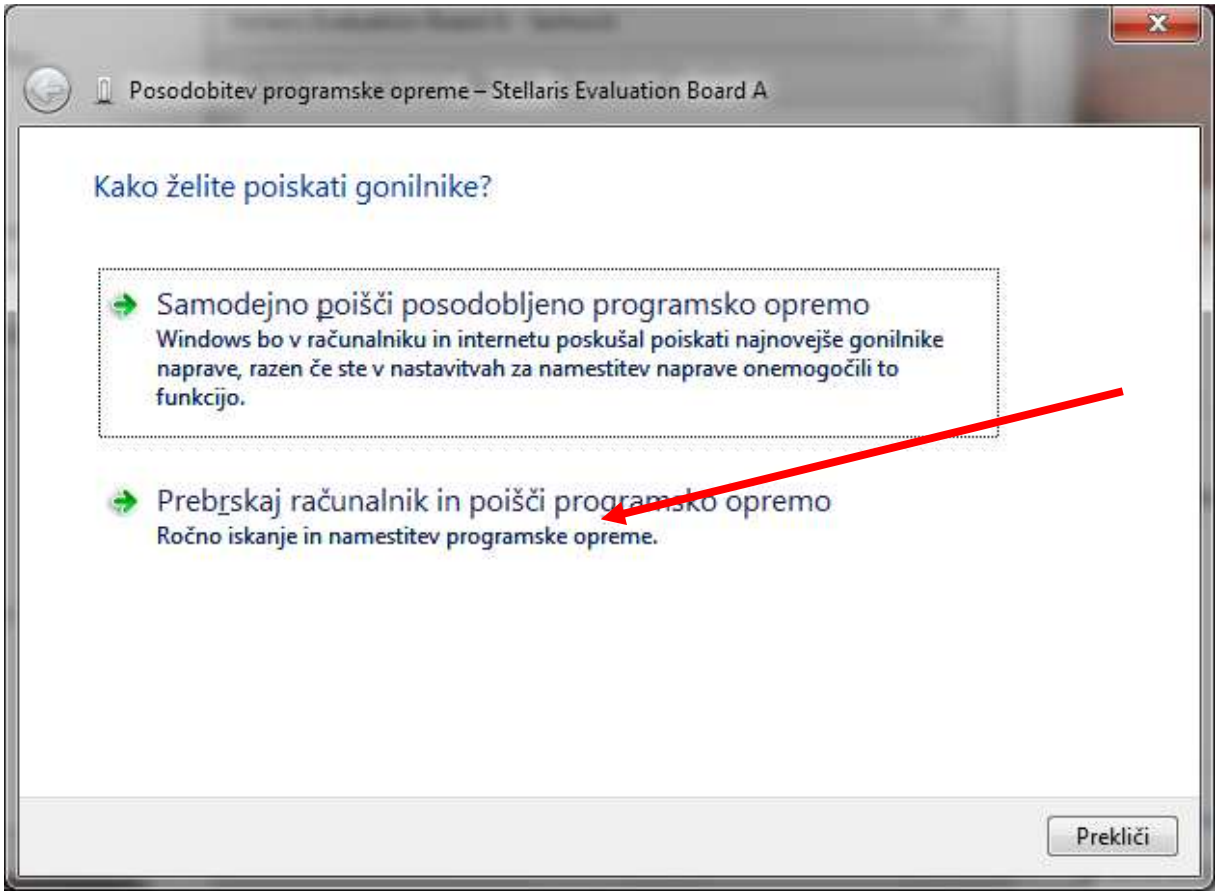
1. Open Device manager on Control panel. You will find "Stellaris Evaluation Board" marked with yellow "!" sign. Right click on it and choose properties.



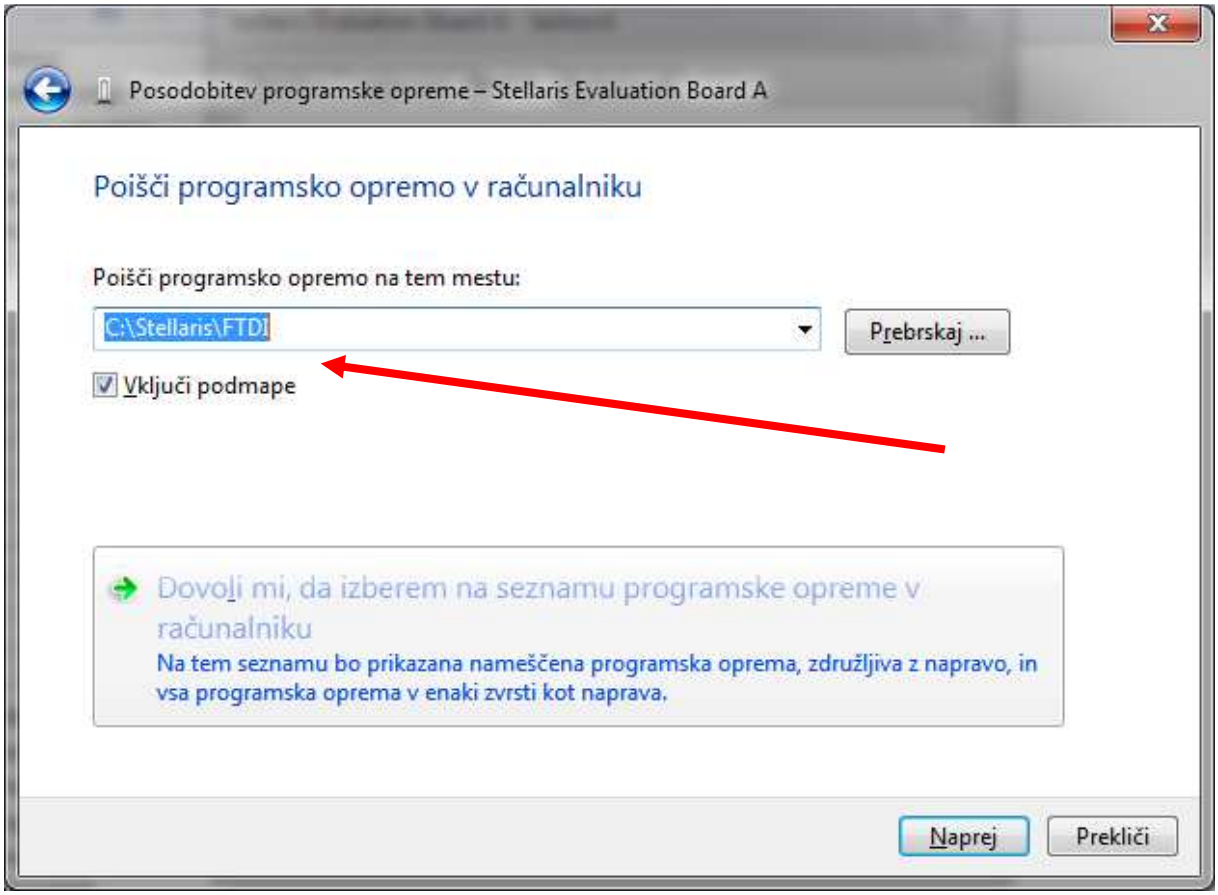
2. In property window select "Driver" tab and click on Update driver



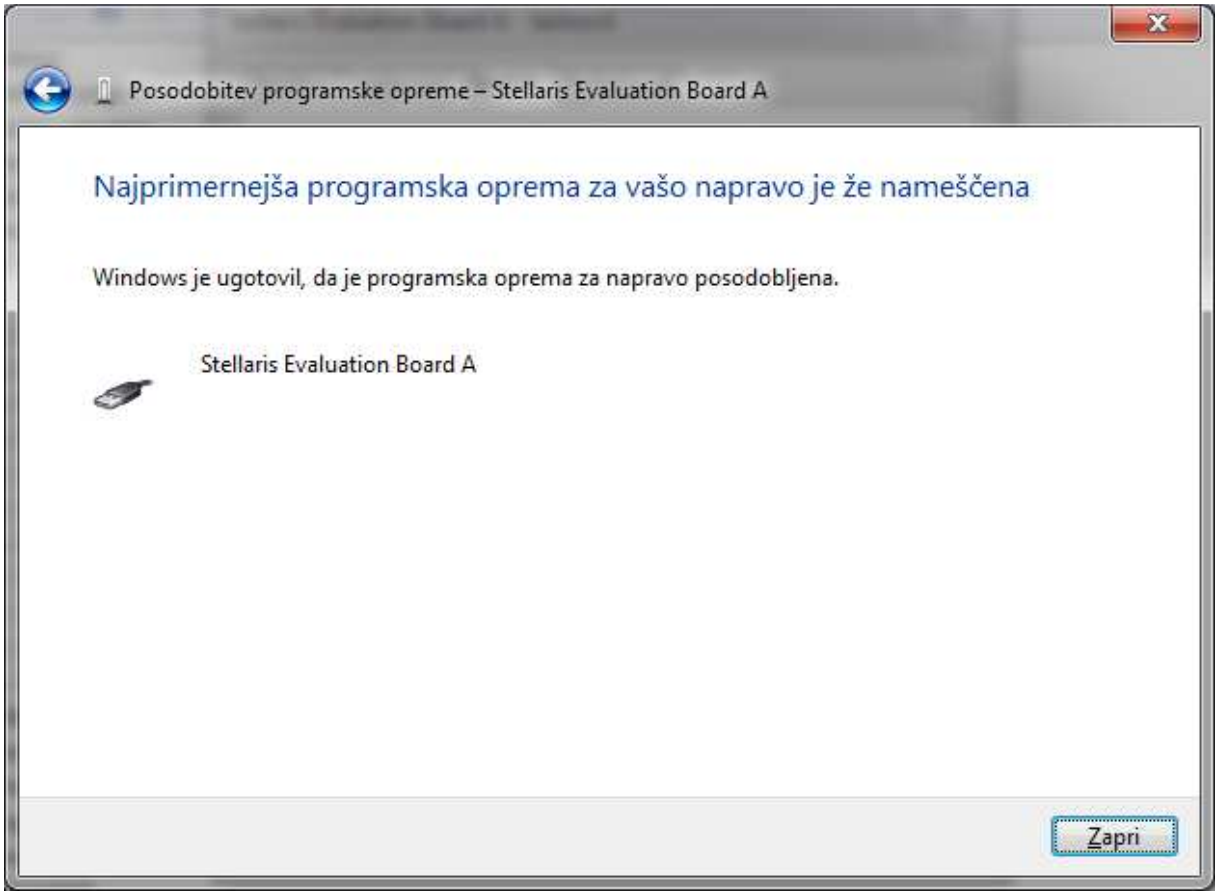
3. Find drivers manually


Posodobitev programske opreme – Stellaris Evaluation Board A
Kako želite poiskati gonilnike?
Samodejno poišči posodobljeno programsko opremo
Windows bo v računalniku in internetu poskušal poiskati najnovejše gonilnike naprave, razen če ste v nastavitvah za namestitev naprave onemogočili to funkcijo.
Prebrskaj računalnik in poišči programsko opremo
Ročno iskanje in namestitev programske opreme.
Prekliči

4. Select folder "c:\Stellaris\FTDI" for installing driver. Mark "Include subfolders".


Posodobitev programske opreme – Stellaris Evaluation Board A
Poišči programsko opremo v računalniku
Poišči programsko opremo na tem mestu:
C:\Stellaris\FTDI
Prebrskaj ...
Vključi podmape
Dovoli mi, da izberem na seznamu programske opreme v računalniku
Na tem seznamu bo prikazana nameščena programska oprema, združljiva z napravo, in vsa programska oprema v enaki zvrsti kot naprava.
Naprej
Prekliči

5. The driver is installed. Click close to finish.

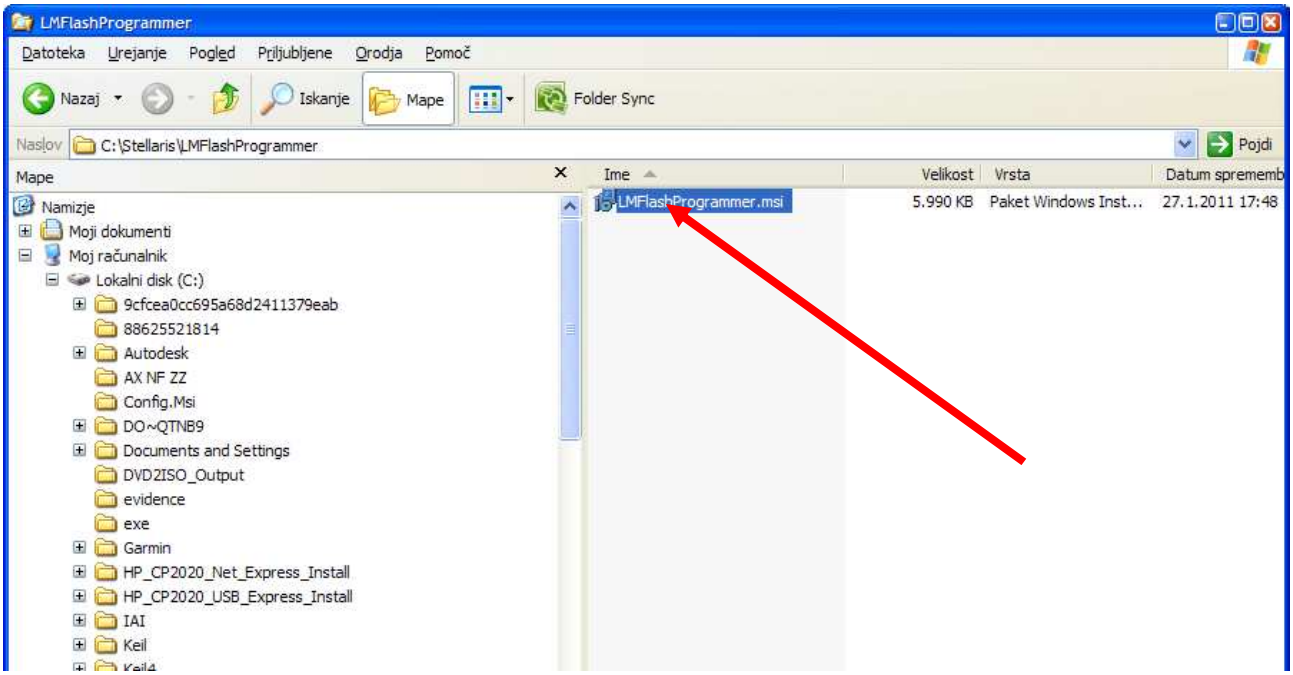

Posodobitev programske opreme – Stellaris Evaluation Board A
Najprimernejša programska oprema za vašo napravo je že nameščena
Windows je ugotovil, da je programska oprema za napravo posodobljena.
Stellaris Evaluation Board A
Zapri

Repeat steps 1-5 for all Stellaris devices in "Device manager".

2.3 INSTALL LM FLASH PROGRAMMER UTILITY

After installing drivers install "LM flash programmer" utility.

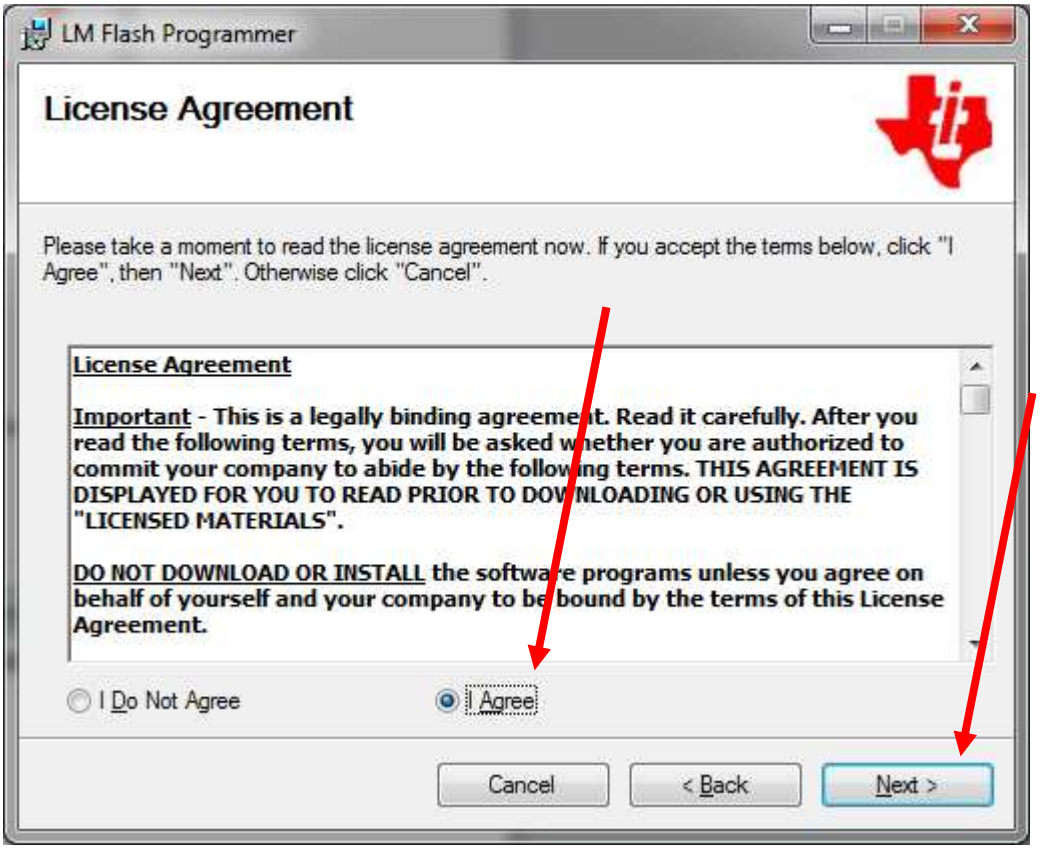
1. In Windows explorer open folder " C:\Stellaris\LMFlashProgrammer". Click on "LMFlashProgrammer.msi"



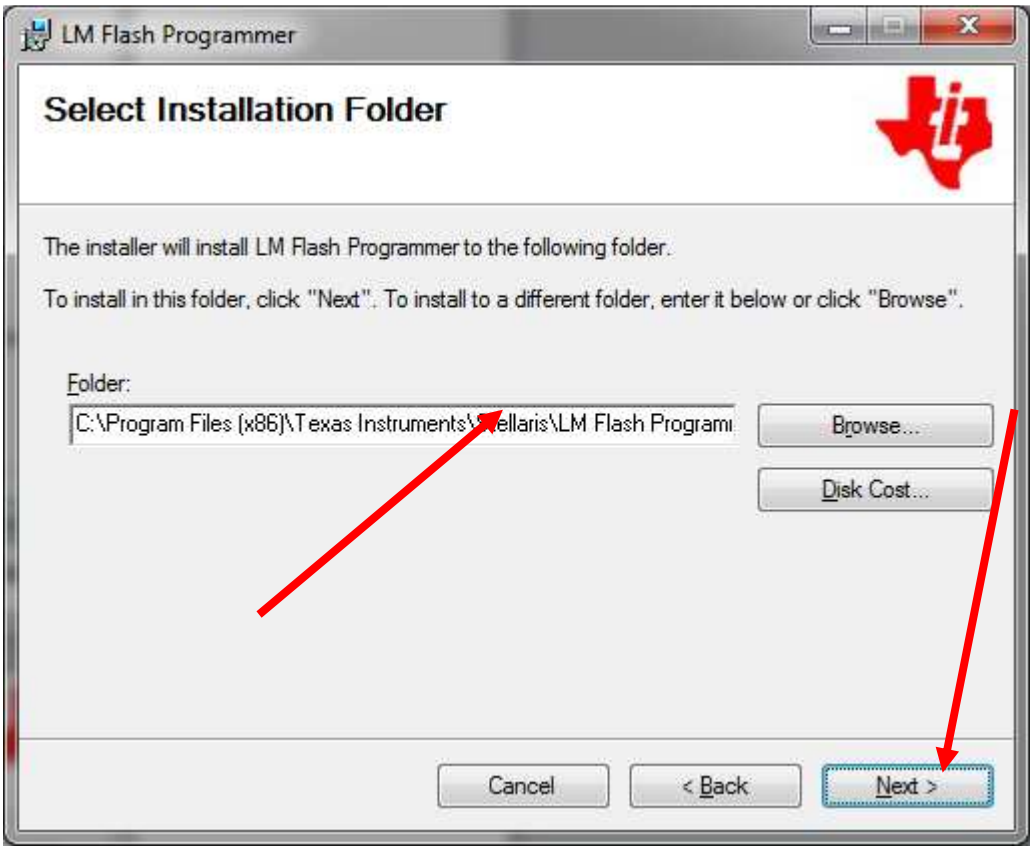
2. Click NEXT on first screen of installation wizard

LM Flash Programmer
Welcome to the LM Flash Programmer Setup Wizard
The installer will guide you through the steps required to install LM Flash Programmer on your computer.
WARNING: This computer program is protected by copyright law and international treaties. Unauthorized duplication or distribution of this program, or any portion of it, may result in severe civil or criminal penalties, and will be prosecuted to the maximum extent possible under the law.
Cancel
< Back
Next >

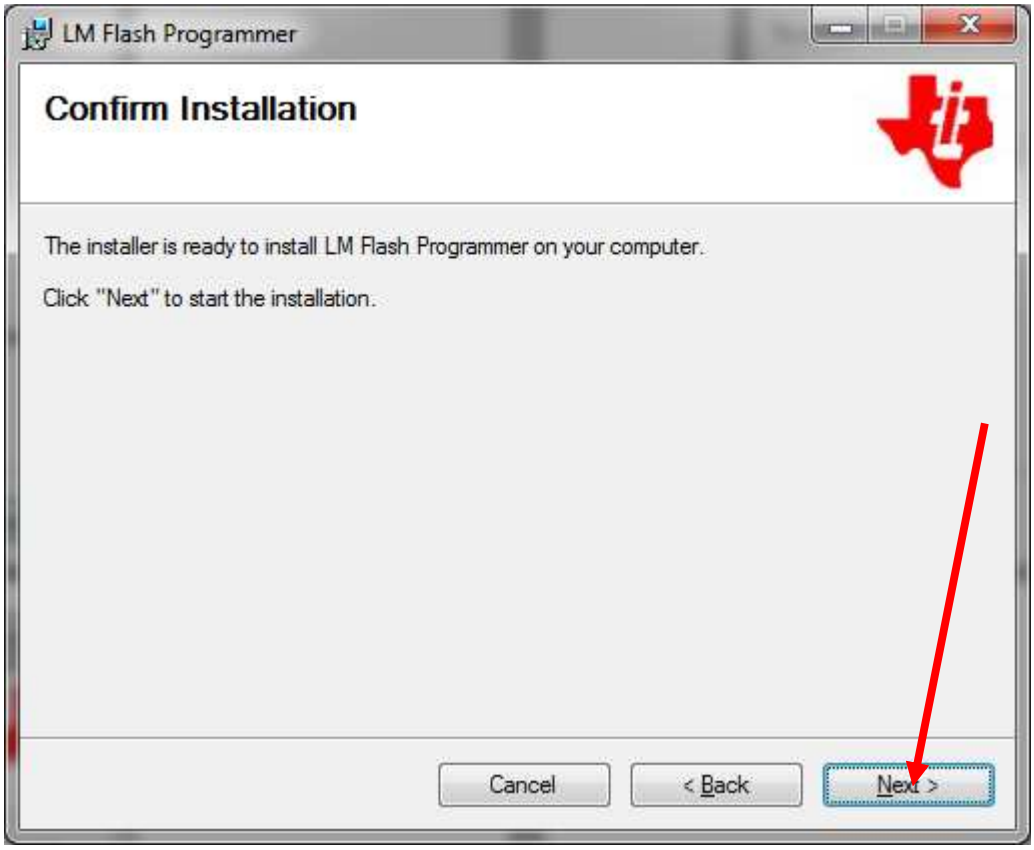
3. Select "I agree" and NEXT


LM Flash Programmer
License Agreement
Please take a moment to read the license agreement now. If you accept the terms below, click "I Agree", then "Next". Otherwise click "Cancel".
License Agreement
Important - This is a legally binding agreement. Read it carefully. After you read the following terms, you will be asked whether you are authorized to commit your company to abide by the following terms. THIS AGREEMENT IS DISPLAYED FOR YOU TO READ PRIOR TO DOWNLOADING OR USING THE "LICENSED MATERIALS".
DO NOT DOWNLOAD OR INSTALL the software programs unless you agree on behalf of yourself and your company to be bound by the terms of this License Agreement.
I Do Not Agree
I Agree
Cancel
< Back
Next >

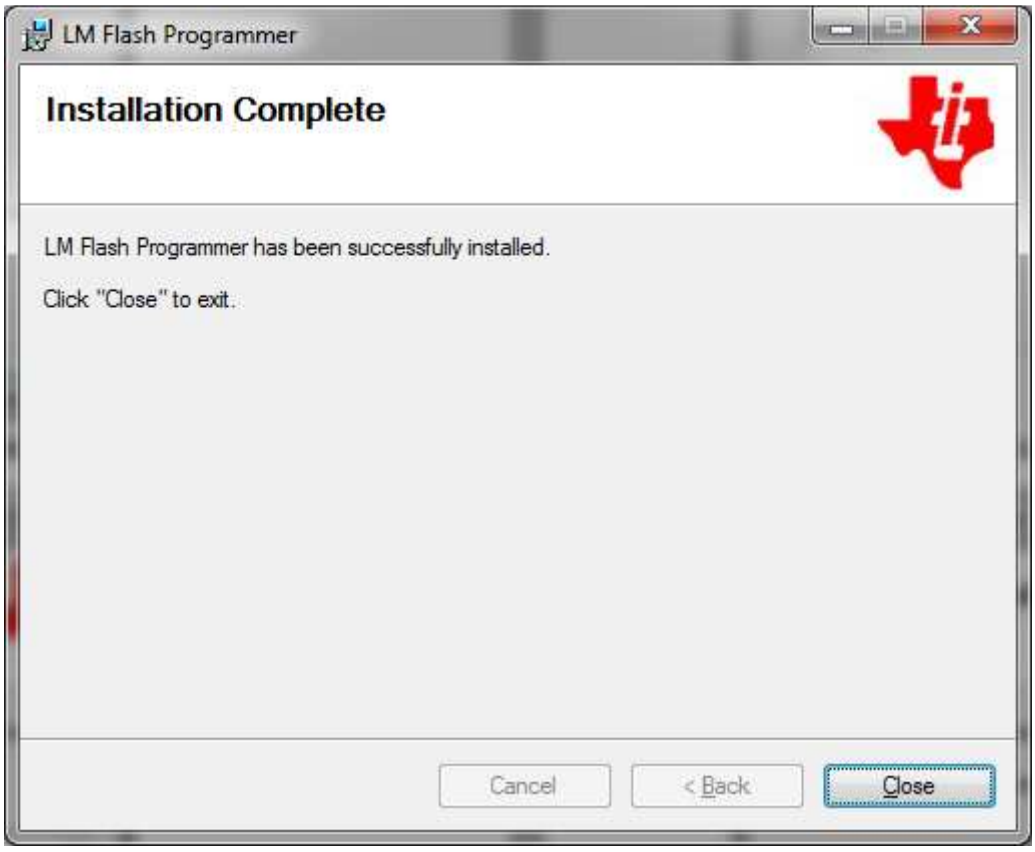
4. Select folder to install the software and click NEXT


LM Flash Programmer
Select Installation Folder
The installer will install LM Flash Programmer to the following folder.
To install in this folder, click "Next". To install to a different folder, enter it below or click "Browse".
Folder:
C:\Program Files (x86)\Texas Instruments\Stellaris\LM Flash Programı
Browse...
Disk Cost...
Cancel
< Back
Next >

5. Confirm to start the installation with pressing button NEXT


LM Flash Programmer
Confirm Installation
The installer is ready to install LM Flash Programmer on your computer.
Click "Next" to start the installation.
Cancel
< Back
Next >

6. Wait installation to complete and click CLOSE button



3 UPGRADING MACHINE FIRMWARE

Before starting upgrade of machine firmware install drivers and "LM Flash programmer" utility to computer.

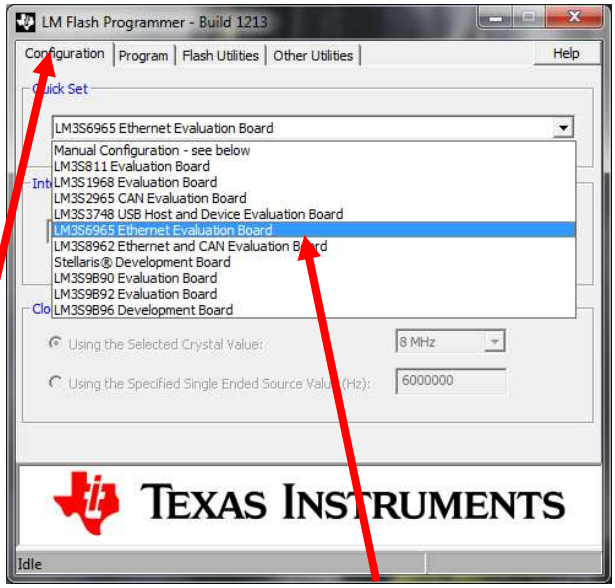
To upgrade the machine firmware following steps must be done:

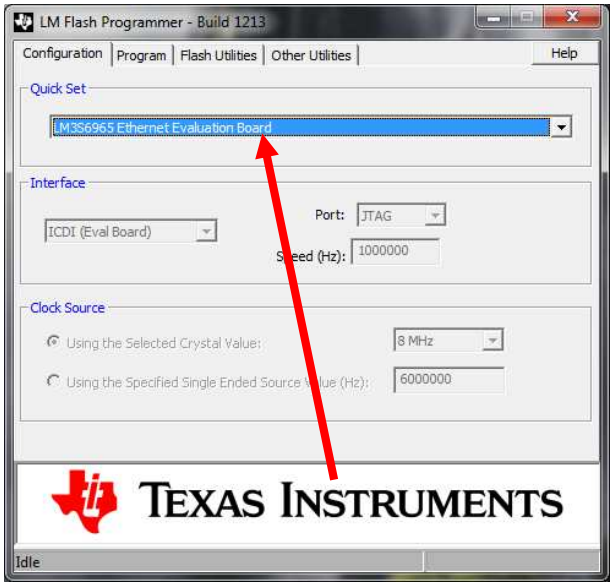
1. Set up "LM Flash programmer" utility
2. Download old version of firmware
3. Upgrade new version of firmware

3.1 SETTING UP "LM FLASH PROGRAMMER"

1. Connect machine and PC with USB cable. Lose screws on machine's front panel if USB connector is not accessible.

2. Start "LM Flash programmer". Select "Configuration" tab and choose "LM3S6965 Ethernet Evaluation Board" in "Quick Set".



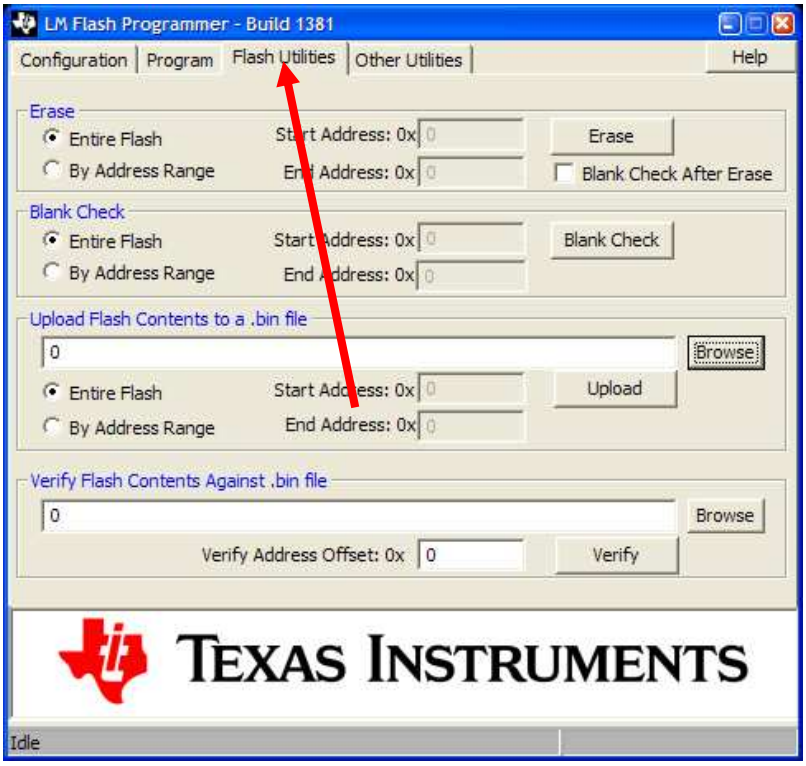


Now right device is set for using "LM Flash programmer" utility.

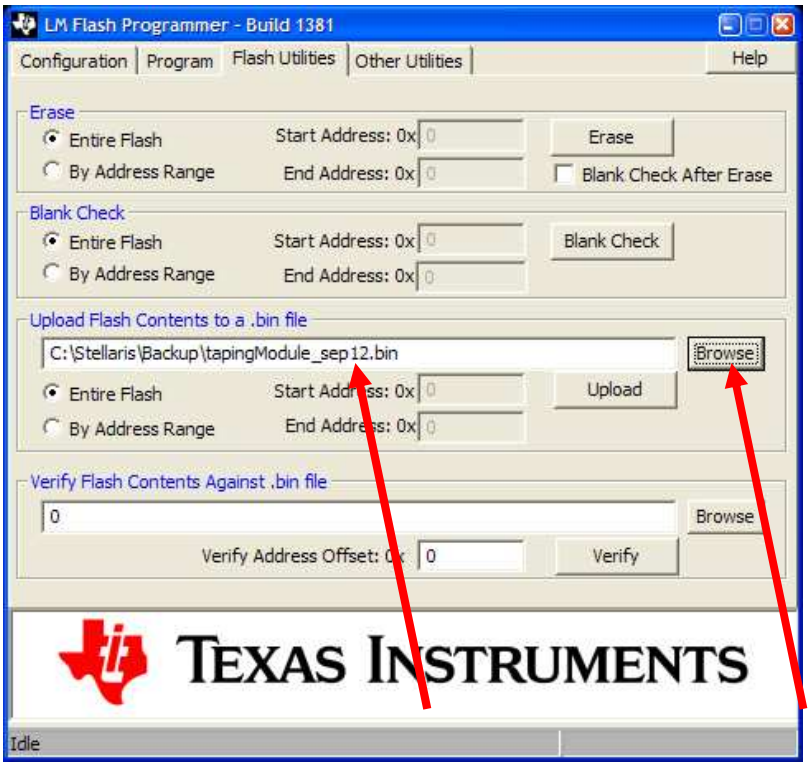
3.2 DOWNLOADING OLD VERSION OF SOFTWARE

Before upgrading machine with new firmware it's recommended to create backup of old version of firmware.

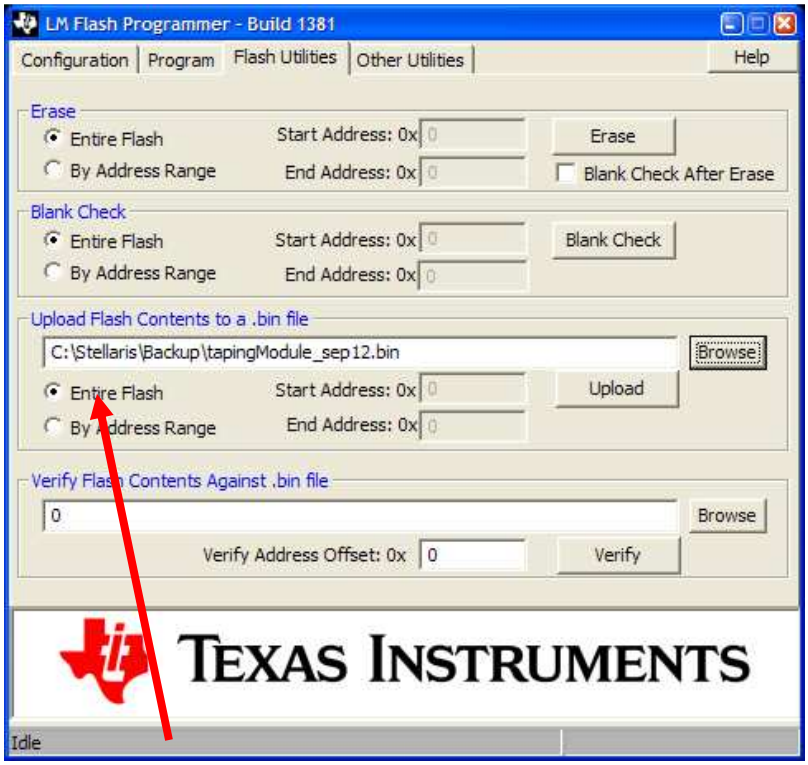
1. Select "Flash Utilities" tab in "LM Flash programmer".



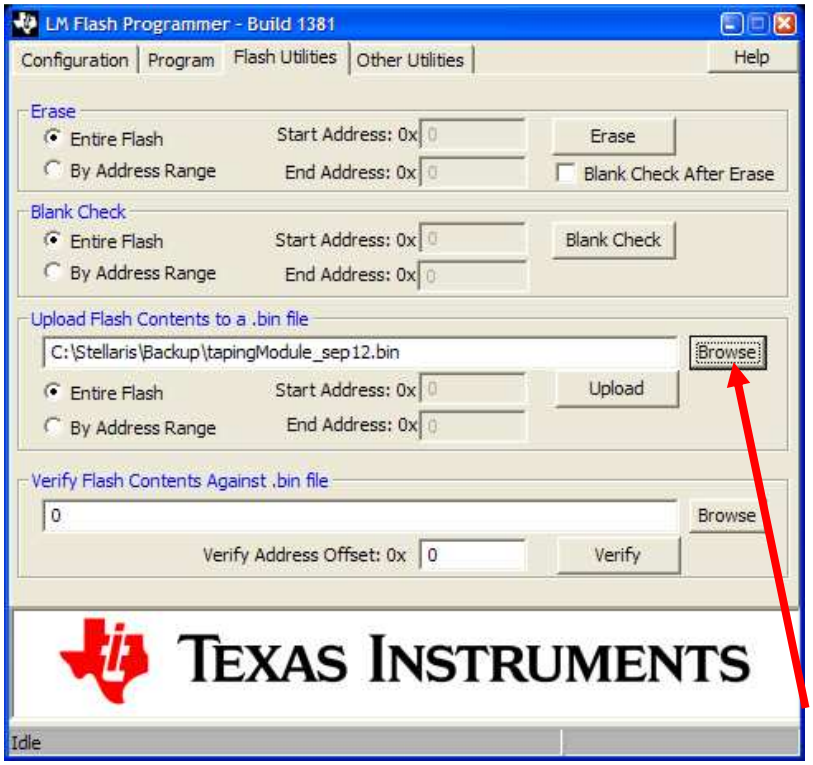
2. Select upload destination and name of backup file. i.e "c:\Stellaris\backup\tapingModule_sep11.bin" by pressing "Browse" button.



3. Select Entire Flash to be uploaded



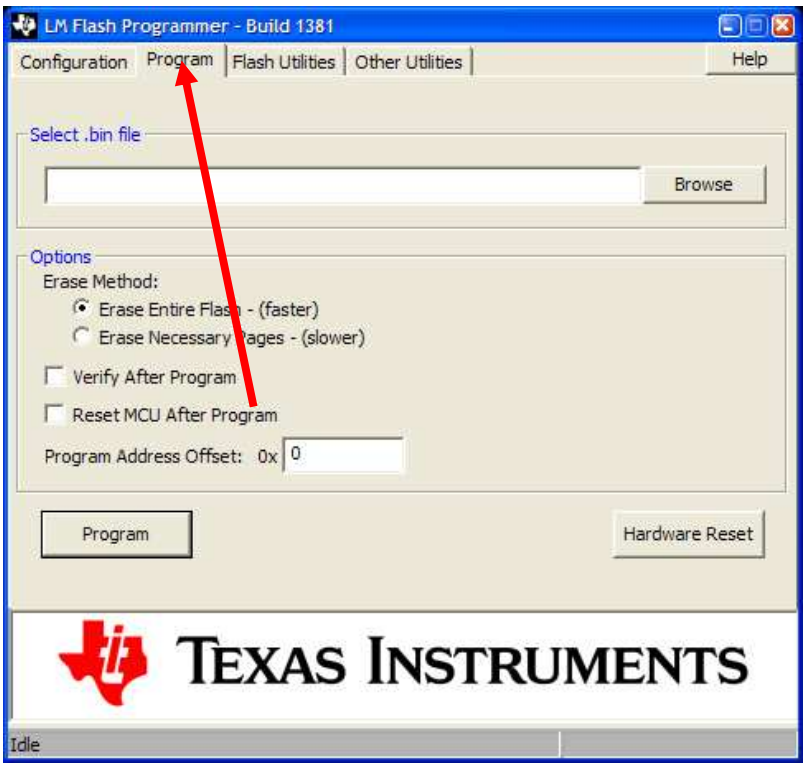
4. Click Upload button to start upload procedure



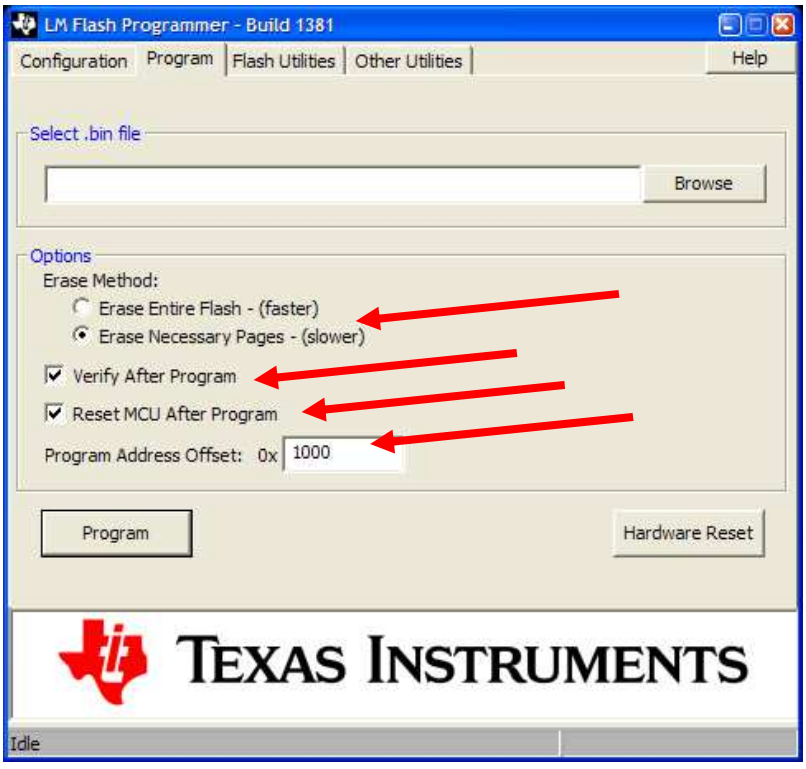
Old firmware is now uploaded and stored on computer.

3.3 UPGRADING MACHINE WITH NEW FIRMWARE

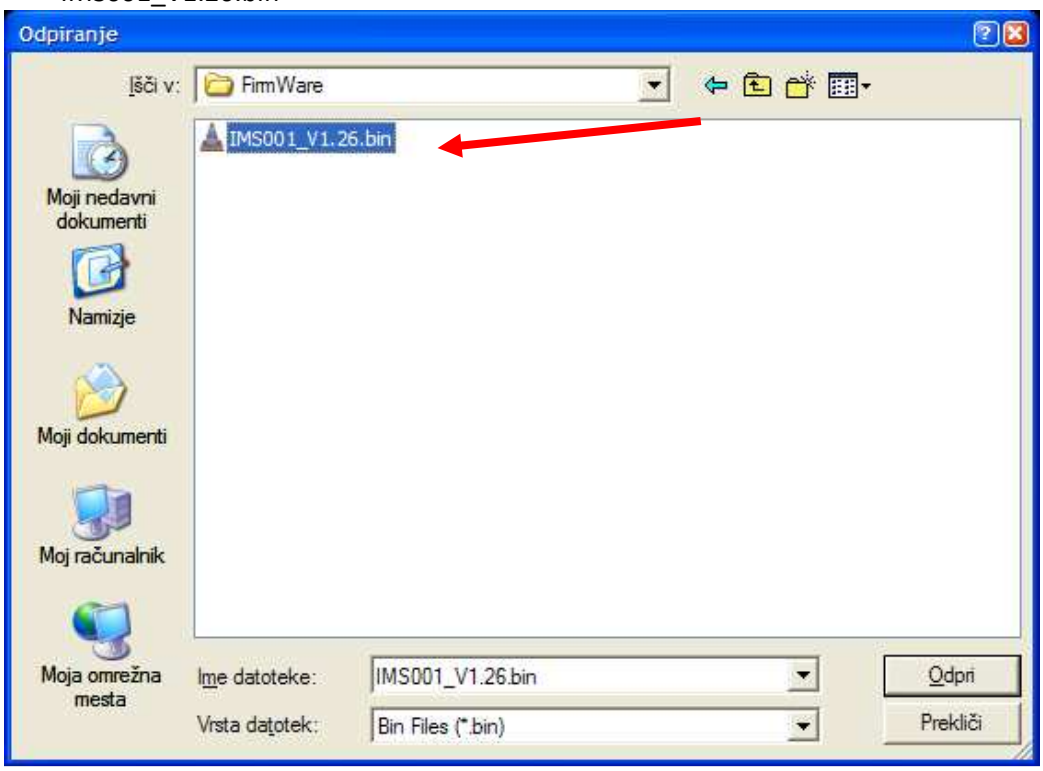
1. Open "LM Flash programmer" utility and select "Program" tab



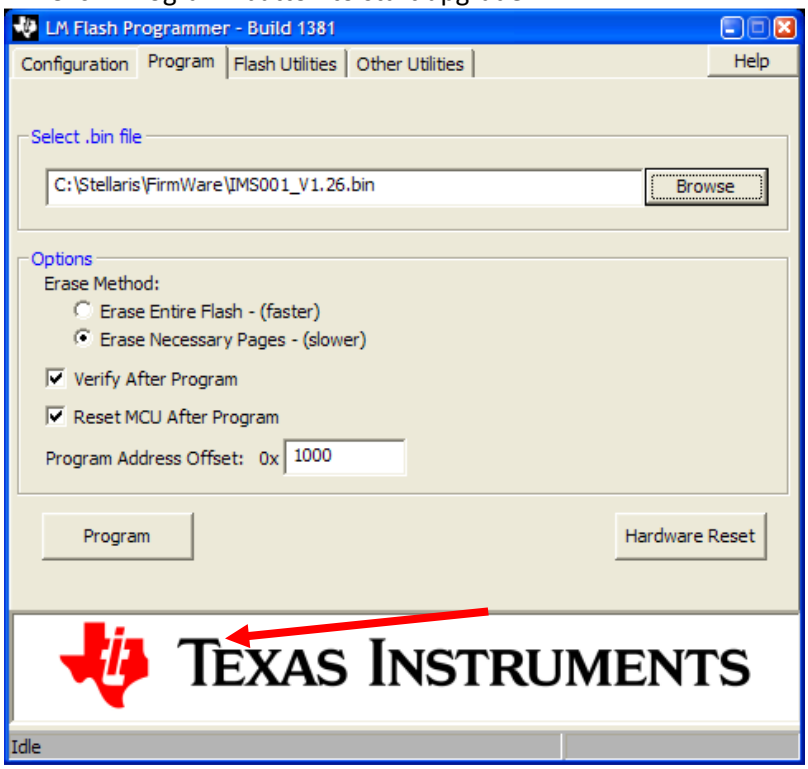
2. Set up programming options to:
   - "Erase Necessary Pages – (slower)
   - Verify After Program
   - Reset MCU After Program
   - Program Address Offset: 0x **1000**



3. Select file for upgrade by pressing "Browse" button. Go to "c:\Stellaris\Firmware" and select "IMS001_V1.26.bin"



4. Click "Program" button to start upgrade



Wait a few seconds that upgrade completes.